



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,887	10/31/2003	David W. Braun	IN-5700	2696
26922	7590	11/30/2007		
BASF CORPORATION Patent Department 1609 BIDDLE AVENUE MAIN BUILDING WYANDOTTE, MI 48192			EXAMINER MCCLENDON, SANZA L	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			11/30/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LORI.HASS@BASF.COM
MARJORIE.ELLIS@BASF.COM
ANNE.SABOURIN@BASF.COM

Office Action Summary	Application No. 10/698,887	Applicant(s) BRAUN ET AL.	
	Examiner Sanza L. McClendon	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,9-12 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,9-12 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the Amendment received on September 13, 2007, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claim 6, 8 and 13-23, as well as, the addition of new claim 24. After reconsideration and applicant's amendment to the claims, the examiner feels the need for a new ground of rejection. In addition, the examiner has found at least one co-pending application that is applicable to Double Patenting rejection. Therefore this office action will be considered as a non-final office action.

Response to Arguments

2. Applicant's arguments with respect to claims 1-5, 7, 9-12 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 7, 9-12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al (2002/0132885) in view of Fenn et al (2003/0059555).

Burns et al teaches nitrocellulose based protective coatings (top coats) for use in the automotive industry. Said compositions comprise 3 to about 25% of nitrocellulose, from about 10 to about 50% of a reactive diluent whose homopolymers has a Tg less than about 25 °C, from about 25 to about 75% of a reactive diluent whose homopolymers is greater than about 25 °C, and 5 to about 40% of an acrylated urethane. The composition additionally comprises a photoinitiator and conventional additive. Said initiator is used in amounts from 0.5 to about 5% and said additives are found in amounts from up to

Art Unit: 1796

about 2% by weight. Said reactive diluents whose homopolymer has a Tg less than about 25 °C can be found on page 2 and include octyl acrylate, decyl acrylate and mixtures of octyl/decyl acrylate-see [0022]. The reactive diluent whose homopolymer has a Tg of greater than 25 °C can be found on page 3 and include dipentaerythritol penta-acrylate. It appears that these teachings anticipate claims 1-3. Burns et al teaches the photoinitiators can be used in combination and in example 1 uses a photoinitiator mixture of Irgacure 369 and Darocure 1173. Thus claim 5 is read in the reference. Burns et al does not explicitly teach the irradiance levels and times as found in the instant claim 7, however, applicant has not established the criticality of such irradiance levels and times and as such it is deemed that said levels and times are within the skill level of an ordinary artisan without the burden of undue experimentation and thus found obvious in view of the reference. Burns et al does not explicitly teach curing said composition with a UV source as instantly claimed (see claims 1 and 9-10). However, curing compositions using a radiation source having a UVB: UVA ratio of 1:1 or less and substantially no UVC content are known for their usages in the automotive industry because of its ease in operation and safety standards. Therefore it would have been obvious for one of ordinary skill in the art to cure the coating compositions of Burns et al with a radiation source as described by Fenn et al, wherein the motivation would have been a reasonable expectation of success in speediness of curing coupled with known features, such as industrial safety and reliability of a known procedure/process in the absence of evidence to the contrary and/or unexpected results. The examiner deems that the radiation sources taught by Fenn et al read on the claimed sources, since the claimed source ratio for UVV:UVA can be 1:1 or less, which includes zero and the same applies for UVA:UVC. Claims 11-12 are deemed to be read in Fenn et al, and therefore the combination, since Fenn et al includes a ratio of 0.025:1 UVB:UVA, wherein 0.025 UVB can be considered substantially none.

5. Claims 1-3, 5, 7, 9-12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diener et al (5,932,282) in view of Fenn et al (2003/0059555).

Diener et al sets forth a clear lacquer coating composition useful in repairing vehicles. Said clear lacquer comprises a composition comprising a binder-vehicle hardenable by exposure to radiation, a reactive thinners, photoinitiators, and additives, such as rheology influencing agents, thickeners, wetting agents, light stabilizers, solvents and the like. Said reactive thinners can be found in column 3, lines 40-60, wherein at least some of those instant claimed (claim 2) can be found. Reactive thinners are used in amounts from 1-50% by weight. Said photoinitiators can be found in column 4 and used in the composition in amounts from 0.5 to 3% by weight. Diener et al disclose that said photoinitiators can be used in mixtures, thus claim 5 is anticipated. The binder vehicles can be found in column 3. It is deemed that at least some of those found in instant claim 3 can be found. It can be seen from the examples the weight percentages of the components are within the instantly claimed weight percents ranges. The organic solvents can be found in column 4, lines 55 to the end. While Diener et al does teach curing by

Art Unit: 1796

exposure to radiation, Diener et al does not expressly teach irradiance levels as instantly claimed. Diener et al does disclose the exposure time is within the range of a few seconds, ranging from 4 to 160 seconds. It is also disclosed the entire process, such as base coat/clear coat structure drying time including the pre-drying the base coat takes from 5 to 10 minutes. The examiner deems that since applicant has not established the criticality of using the claimed irradiance levels and there being no structural difference between the cured coating of Diener et al and the cured coating of the claims that it would have been obvious to use any irradiance level to cure the instantly claimed composition in the absence of evidence to the contrary and/or unexpected results. Diener et al does not explicitly teach curing said composition with a UV source as instantly claimed (see claims 1 and 9-10). However, curing compositions using a radiation source having a UVB: UVA ratio of 1:1 or less and substantially no UVC content are known for their usages in the automotive industry because of its ease in operation and safety standards. Therefore it would have been obvious for one of ordinary skill in the art to cure the coating compositions of Diener et al with a radiation source as described by Fenn et al, wherein the motivation would have been a reasonable expectation of success in speediness of curing coupled with known features, such as industrial safety and reliability of a known procedure/process in the absence of evidence to the contrary and/or unexpected results. The examiner deems that the radiation sources taught by Fenn et al read on the claimed sources, since the claimed source ratio for UVV:UVA can be 1:1 or less, which includes zero and the same applies for UVA:UVC. Claims 11-12 are deemed to be read in Fenn et al, and therefore the combination, since Fenn et al includes a ratio of 0.025:1 UVB:UVA, wherein 0.025 UVB can be considered substantially none.

6. Claims 1-5, 7, 9-12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahrmann et al (5,425,970) in view of Fenn et al (2003/0059555).

Lahrmann et al teaches multi-coat lacquers comprising two clear coat layers and a pigment layer. The 1st clear coat layer is obtained from a heat curable composition, while the 2nd is obtained from a radiation curable composition. Said radiation curable composition comprises a free radically polymerizable composition comprising prepolymer/oligomers, reactive diluents, photoinitiators, a customary lacquer additives, such as light stabilizers, transparent pigments, solvents, and others as found in column 7. Said prepolymers/oligomers include methacrylic functional methacrylate polymers, epoxy acrylates, polyester acrylates, polyether acrylates, polyurethane acrylates, silicone acrylates, amine acrylates, melamine acrylates, unsaturated polyesters and unsaturated polyurethanes—see column 5. At least some of these anticipate applicant's claim 3. The reactive diluents can be found in column 5, lines 25-40 and include at least some of the instantly claimed compounds of claim 2. The diluents are used in amounts from 1 to 70--wt%. The photoinitiators can also be found in column 5, wherein these are disclosed as being used in combination in amounts from 0.5 to 5--wt%. Thus claim 5 is

Art Unit: 1796

anticipated. The solvents can be found in column 6, lines 25-30 and column 7, lines 12-17. The weight percents found in claim 4 appear to be encompassed within examples 1-4 of the reference. Lahrmann et al does not explicitly teach the irradiance levels and times as found in the instant claim 7, however, applicant has not established the criticality of such irradiance levels and times and as such it is deemed that said levels and times are within the skill level of an ordinary artisan without the burden of undue experimentation and thus found obvious in view of the reference. Lahrmann et al does not explicitly teach curing said composition with a UV source as instantly claimed (see claims 1 and 9-10). However, curing compositions using a radiation source having a UVB: UVA ratio of 1:1 or less and substantially no UVC content are known for their usages in the automotive industry because of its ease in operation and safety standards. Therefore it would have been obvious for one of ordinary skill in the art to cure the coating compositions of Lahrmann et al with a radiation source as described by Fenn et al, wherein the motivation would have been a reasonable expectation of success in speediness of curing coupled with known features, such as industrial safety and reliability of a known procedure/process in the absence of evidence to the contrary and/or unexpected results. The examiner deems that the radiation sources taught by Fenn et al read on the claimed sources, since the claimed source ratio for UVV:UVA can be 1:1 or less, which includes zero and the same applies for UVA:UVC. Claims 11-12 are deemed to be read in Fenn et al, and therefore the combination, since Fenn et al includes a ratio of 0.025:1 UVB:UVA, wherein 0.025 UVB can be considered substantially none.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 1796

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-5, 7, 9-12 and 24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of copending Application No. 10/978,495 (2005/0096427). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following. Said co-pending application, discloses the composition of the instant claims. Although the claims are not identical they do teach the same composition, as well as, the irradiance levels and times. In light of the above disclosure, it would have been obvious to one of ordinary skill in the art at the time of the invention, that while using the claims of the instant invention one would also practice the claims of said co-pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

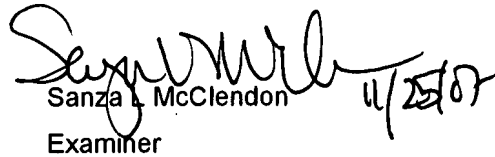
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 2005/0100685 to Flosbach et al teaches primer coating for vehicles using UVA: UVB in a 1:1 ratio. 2003/0059555 and 6,838,177 to Fenn et al both teach primer compositions for vehicles curable by UV radiation having a UVA: UVB ratio of 1:1. 5,231,524 to De Keyser et al teaches acrylic resin clear-coats comprising monomeric acrylic esters and photoinitiators. 6,677,045 to Meisnenburg et al discloses clear topcoat comprising a similar coating composition. 5,532,286 to Burns et al teaches the octyl/decyl acrylates are used in acrylic compositions to decrease the brittleness in the cured coatings—see examples. 5,486,384 to Bastian et al teaches similar compositions. 6,991,833 to Krohn et al teaches similar compositions.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sanza L. McClendon
Examiner

Art Unit 1711

SMc